

**STANDARD REFERENCE:**
**UNI EN 10084: 2008** (Hot-rolled and hot-rolled + turned products) | **UNI EN 10277-4: 2008** (Bright products)

**RODACCIAI REFERENCES AND COMPARABLE STANDARDS**

	EUROPE		ITALY	GERMANY		FRANCE	UK	USA
	UNI EN 10084: 2008 UNI EN 10277-4: 2008		(UNI 7846-78)	(DIN 17210-84)		(NF A 35-551-86)	(BS 970 pt.1 -96)	ASTM A 29
	Grade	N°		Werkstoff	N°			
<b>RC2</b>	17NiCrMo6-4	1.6566	18NiCrMo5	-	-	18 NCD 6	815M17	-
<b>RC2Pb</b>	17NiCrMoS6-4	1.6569		-	-			-

**CHEMICAL COMPOSITION (CAST ANALYSIS) (%)**

	Europe	C	Si / max	Mn	P / max	S	Cr	Mo	Ni	Al	Pb
<b>RC2</b>	17NiCrMo6-4	0,14÷0,20	0,40	0,60÷0,90	0,025	≤ 0,035	0,80÷1,10	0,15÷0,25	1,20÷1,50	0,020÷0,050	-
	17NiCrMoS6-4					0,020÷0,040					-
<b>RC2Pb</b>	17NiCrMoS6-4Pb					0,020÷0,040					0,15÷0,30

**MECHANICAL PROPERTIES - AS ROLLED CONDITION - Hardness (HB) in the condition**

Treated to improve sherability (+S)	Annealed to maximum hardness requirements (+A)	Treated to hardness range (+TH)		Treated to ferrite-pearlite structure and hardness range (+FP)	
≤ 255	≤ 229	≥ 179	≤ 229	≥ 149	≤ 201

For size &lt;5 mm the mechanical properties may be agreed at the time of enquiry and order

**CARATTERISTICHE MECCANICHE FINITI A FREDDO**

Size mm	+A* Turned (+A +SH)	+A* + old drawn (+A+C)	FP** + Turned (+FP +SH)	FP** + old drawn (+FP +C)
	Hardness HB max	Hardness HB max	Hardness HB	Hardness HB
≥ 5 ≤ 10	-	275	-	-
> 10 ≤ 16	-	265	-	-
> 16 ≤ 40	229	260	149÷201	149÷250
> 40 ≤ 63	229	255	149÷201	149÷245
> 63 ≤ 100	229	255	149÷201	149÷245

\*+A = annealed to maximum hardness requirement

\*\*+FP = treated to ferrite-perlite structure and hardness range

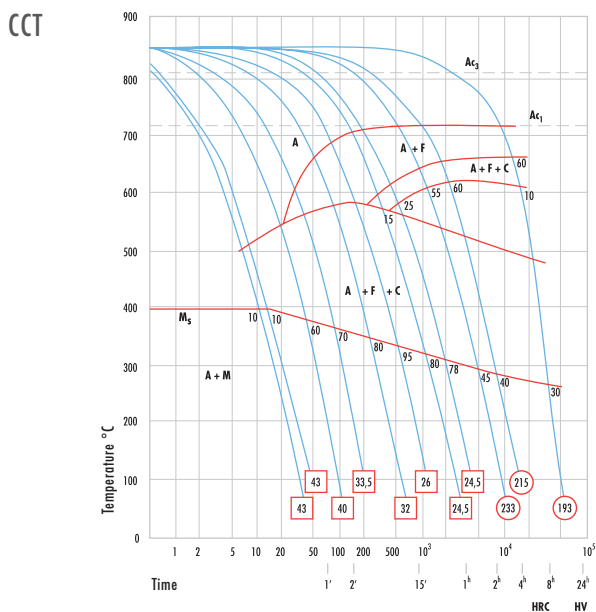
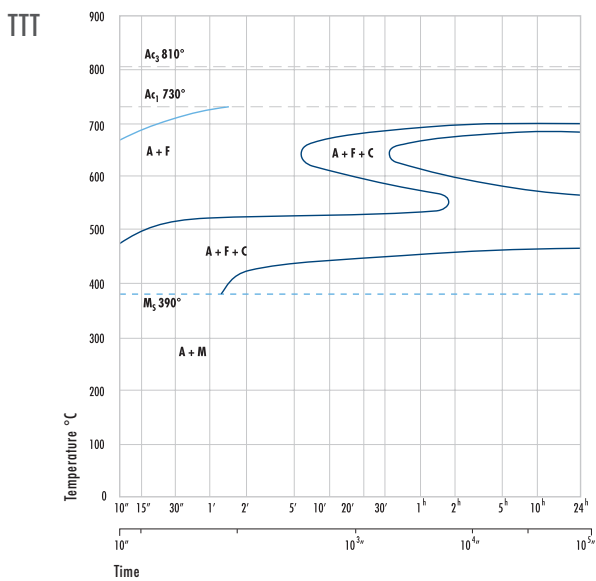
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**WORKING TEMPERATURES RECOMMENDED**

Operation	Hot forgings deformation	Carburizing temperature	Core quenching temperature	Case quenching temperature	Tempering
°C	900÷1150	880÷980	830÷870	780÷820	150÷200

## HARDNESS LIMITS (JOMINY TEST)

Limits of range	Hardness HRC at a distance from quenched end of test pieces (mm)													
	1,5	3	5	7	9	11	13	15	20	25	30	35	40	
+H	Max	48	48	47	46	45	44	42	41	38	36	35	34	33
	Min	40	40	37	34	30	28	27	26	24	23	22	21	-
+HH	Max	48	48	47	46	45	44	42	41	38	36	35	34	33
	Min	43	43	40	38	35	33	32	31	29	27	26	25	24
+HL	Max	45	45	44	42	40	39	37	36	33	32	31	30	29
	Min	40	40	37	34	30	28	27	26	24	23	22	21	-



## TEMPERING CURVE

